

REMARKS

The Office Action of November 14, 2008 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Claims 1-32, 35, 39-41, 43-46, 49-52, 55-64 and 67-75¹ were pending prior to the instant amendment, of which claims 3, 6, 9, 12, 17, 20, 23, 26, 29, 32, 35 and 41 have been withdrawn. By this amendment, claims 1-2, 49-50 and 69 are amended. Consequently, claims 1, 2, 4, 5, 7, 8, 10, 11, 13-16, 18, 19, 21, 22, 24, 25, 27, 28, 30, 31, 39, 40, 43-46, 49-52, 55-64 and 67-75 are currently pending for consideration in the instant application, of which claims 1, 2, 49, 50 and 69 are independent.

In the Office Action, claims 1-2, 4-5, 10-11, 21-22, 24-27, 39-40, 49-50, 57-62 and 67-68 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Pat. Pub. 2001/0004281 to Sasaki et al. (Sasaki) in view of U.S. Pat. Pub. 2002/0063842 to Gyoda (Gyoda) in view of U.S. Patent No. 6,331,884 to Masazumi (Masazumi) and in view of U.S. Patent No. 6,476,899 to Ishida (Ishida); Claims 7, 8 and 51-52 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida in view of U.S. Patent No. 6,226,067 to Nishiguchi et al. (Nishiguchi); claims 13-14 and 55-56 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida in view of U.S. Pat. Pub. 2003/0090609 to Inoue et al. (Inoue); claims 15-16 and 18-19 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida in view of Inoue and further in view of U.S. Patent No. 6,639,647 to Inou et al. (Inou); claims 30-31 and

¹ The Examiner continues to omit listing claims 49-52 in both the pending claims and the rejected claims listings. Also, the Examiner fails to omit canceled claims 65-66 in said listings.

63-64 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida in view of U.S. Patent No. 4,773,737 to Yokono et al. (Yokono); claims 43 and 45 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida and further in view of U.S. Pat. Pub. 2002/0027636 to Yamada (Yamada); claims 44 and 46 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida and further in view of U.S. Pat. Pub. 2001/0052959 to Tamatani et al. (Tamatani); claims 69, 71-72 and 75 stand rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi and further in view of Ishida and further in view of U.S. Patent No. 5,796,458 to Koike (Koike); claim 70 stands rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida in view of Koike in view of Nishiguchi; claim 74 stands rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida in view of Koike in view of Inoue; and claim 73 stands rejected under 35 U.S.C. § 103(a) as being obvious over Sasaki in view of Gyoda in view of Masazumi in view of Ishida in view of Koike in view of Yokono. These rejections are respectfully traversed at least for the reasons provided below.

The Examiner has failed to establish a *prima facie* case of obviousness for at least the following reasons. First, the Examiner has not demonstrated how Sasaki, Gyoda, Masazumi, Ishida and/or Koike, whether taken alone or in combination, disclose or suggest each and every feature recited in the claims. *See* M.P.E.P. § 2143 (7th ed. 1998). Second, the Examiner has not shown the existence of any reasonable probability of success in modifying Sasaki, the base reference, based on the teachings of Gyoda, Masazumi, Ishida and/or Koike,

the secondary references, in a manner that could somehow result in the claimed invention.
See id.

Each of the Examiner's factual conclusions must be supported by "substantial evidence" in the documentary record, as required by the Federal Circuit. *See In re Lee*, 61 U.S.P.Q.2d 1430, 1435 (Fed. Cir. 2002). The Examiner has the burden of documenting all findings of fact necessary to support a conclusion of anticipation or obviousness "less the 'haze of so-called expertise' acquire insulation from accountability." *Id.* To satisfy this burden, the Examiner must specifically identify where support is found within the prior art to meet the requirements of 35 U.S.C. §§ 102(b) and 103. In this case, however, the Examiner has failed to satisfy his burden of demonstrating how Sasaki, taken alone or in combination with Gyoda, Masazumi, Ishida and/or Koike, can either anticipate or render obvious each and every one of the limitations present in independent claims 1, 2, 49, 50 and 69, as required by the M.P.E.P. and Federal Circuit jurisprudence.

With respect to independent claims 1, 2, 49 and 50, the Examiner asserts that Sasaki teaches a manufacturing method of a liquid crystal display device comprising: forming a seal material that surrounds a pixel area (display area see abstract) on a first substrate (Fig.7 step A2 and see abstract (c)); forming a seal material on the second substrate (A2); discharging a plurality of droplets containing a liquid crystal only on a region of the first substrate (Fig.7 step A3 and also see abstract (e)), the region surrounded by the seal material; pasting the first substrate and the second substrate (A5 and abstract (f)); and dividing the pasted pair of first and second substrates (A7). The Examiner admits that Sasaki lacks the claimed features of discharging a plurality of droplets by ink-jet under reduced pressure; discharging the sealed material by inkjet; and dropping the liquid crystals is discharged from a plurality of movable nozzles (see Office Action, page 3). The Examiner relies upon Gyoda for curing the

deficiencies of Sasaki, since the Examiner asserts that Gyoda teaches discharge of a liquid crystal layer by inkjet in a vacuum that provides discharge with high accuracy (paragraph [0107] of Gyoda). Further, the Examiner relies upon Masazumi for curing the deficiencies of Sasaki, since the Examiner asserts that Masazumi teaches discharges dropping from a plurality of movable nozzles (see col. 16, lines 30-67 of Masazumi). Also, the Examiner relies upon Ishida for curing the deficiencies of Sasaki, since the Examiner admits that Sasaki fails to teach discharging the seal material by ink-jet, however, Ishida teaches resin sealing members that are disposed by ink-jet (see column 8 lines 22-42). However, Applicants contend that Sasaki in view of Gyoda in view of Masazumi and further in view of Ishida, fails to render the claimed invention unpatentable. Each of the claims recite a specific combination of features that distinguishes the invention from the prior art in different ways. For example, independent claims 1 and 2 recite a combination that includes, among other things:

forming an alignment layer over a first substrate; performing a rubbing on the alignment layer in a rubbing direction ... wherein the plurality of droplets containing the liquid crystal are discharged under reduced pressure by ink-jet from a plurality of nozzles which relatively move to the rubbing direction.

Independent claims 49 and 50 recite yet another combination that includes, *inter alia*,

forming an alignment layer over a first substrate; performing a rubbing on the alignment layer in a rubbing direction ... wherein the plurality of droplets containing the liquid crystal are discharged by ink-jet from a plurality of nozzles which relatively move to the rubbing direction.

At the very least, the applied references, whether taken alone or in combination, fail to disclose or suggest any of these exemplary features recited in independent claims 1, 2, 49 and 50. For instance, the Examiner asserts, as mentioned above, that Masazumi discloses these

features in col. 16, lines 30-67. However, Applicants could not find these exemplary features in Masazumi. In fact, Applicants found instead that the base 5A moves and droplets of the liquid crystal materials 9a, 9a' and 9a'' are applied over the base 5A. Masazumi discloses a roll-to-roll method (see, col. 13, lines 63-65). Thus, Masazumi fails to disclose or suggest the feature of a plurality of nozzles which relatively move to the rubbing direction, as presently claimed. In view of the above, Applicants contend that even when the cited references are combined, the present invention cannot be obtained. Therefore, it cannot be said that Sasaki, taken alone or in combination with Gyoda, Masazumi and Ishida, makes obvious the present invention, as claimed.

With respect to independent claim 69, the Examiner relies upon Koike for curing the deficiencies of Sasaki, since the Examiner admits that Sasaki fails to teach forming an alignment layer via inkjet however, Koike discloses a patterned alignment layer disposed via inkjet. However, claim 69 now recites, *inter alia*, the features of “forming an alignment layer over the first substrate by ink-jet; performing a rubbing on the alignment layer in a rubbing direction ... wherein the plurality of droplets containing the liquid crystal are discharged from a plurality of nozzles which relatively move to the rubbing direction.” Therefore, it cannot be said that Sasaki, taken alone or in combination with Gyoda, Masazumi, Ishida and Koike, makes obvious the present invention, as claimed.

Further, Nishiguchi, Inoue, Inou, Yokono, Yamada and Tamatani fail to overcome the deficiencies mentioned above.

In accordance with the M.P.E.P. § 2143.03, to establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In*

re Wilson, 424 F.2d 1382, 1385, 165 USPQ 196 (CCPA 1970). Therefore, it is respectfully submitted that neither Sasaki, Gyoda, Masazumi, Ishida and/or Koike, taken alone or in any proper combination, discloses or suggests the subject matter as recited in claims 1, 2, 49, 50 and 69. Hence, withdrawal of the rejection is respectfully requested.

Each of the dependent claims depend from one of independent claims 1, 2, 49, 50 or 69 and are patentable over the cited prior art for at least the same reasons as set forth above with respect to claims 1, 2, 49, 50 and 69.

In addition, each of the dependent claims also recite combinations that are separately patentable.

In view of the foregoing remarks, this claimed invention, as amended, is not rendered obvious in view of the prior art references cited against this application. Applicants therefore request the entry of this response, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

In discussing the specification, claims, and drawings in this response, it is to be understood that Applicants in no way intend to limit the scope of the claims to any exemplary embodiments described in the specification and/or shown in the drawings. Rather, Applicants are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Should the Examiner believe that a telephone conference would expedite issuance of the application, the Examiner is respectfully invited to telephone the undersigned agent at (202) 585-8100.

Respectfully submitted,

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